STATE AGRICULTURE DEVELOPMENT COMMITTEE

2012 Annual Appraisal Conference

Program review

Susan E. Payne – Executive Director

Program Review
Susan Payne Executive Director - SADC

SADC Website

- http://www.state.nj.us/agriculture/sadc

New Jersey Farmland Preservation Program
SUMMARY of PRESERVED FARMLAND

Participating Counties	Number of Farms	Percent of Total State Farms	Number of Municipalities	Acres	Average Farm Size	Percent of Total State Acres	Total Cost	Percent of Total Cost for State	Per Acre Total Cost	State Cost	Percent of State Cost for State	Per Acre State Cost	State Cost Share Percent	County/ Municpality/ Fed Fund Cost
Atlantic	48	2.3%	8	5,105	106	2.6%	17,577,982	1.2%	3,443	13,423,706	1.4%	2,629	76%	4,154,276
Bergen	7	0.3%	4	318	45	0.2%	16,016,072	1.1%	50,392	9,719,643	1.0%	30,581	61%	6,296,429
Burlington	193	9.2%	20	24,333	126	12.4%	142,658,859	9.5%	5,863	87,078,569	9.0%	3,579	61%	55,580,290
Camden	12	0.6%	3	972	81	0.5%	14,628,974	1.0%	15,049	8,411,227	0.9%	8,653	57%	6,217,748
Cape May	44	2.1%	6	2,628	60	1.3%	15,411,423	1.0%	5,864	9,216,018	0.9%	3,507	60%	6,195,405
Cumberland	135	6.5%	11	16,180	120	8.2%	36,973,374	2.5%	2,285	28,288,379	2.9%	1,748	77%	8,684,996
Gloucester	143	6.8%	14	11,565	81	5.9%	82,838,336	5.5%	7,163	53,605,875	5.5%	4,635	65%	29,232,461
Hunterdon	352	16.9%	16	28,712	82	14.6%	248,395,241	16.5%	8,651	171,559,468	17.7%	5,975	69%	76,835,774
Mercer	102	4.9%	8	7,618	75	3.9%	98,099,135	6.5%	12,878	58,733,079	6.0%	7,710	60%	39,366,057
Middlesex	49	2.3%	7	4,652	95	2.4%	57,459,136	3.8%	12,351	39,189,188	4.0%	8,424	68%	18,269,948
Monmouth	176	8.4%	10	13,339	76	6.8%	207,857,842	13.8%	15,583	131,441,851	13.5%	9,854	63%	76,415,991
Morris	118	5.6%	14	7,319	62	3.7%	143,340,725	9.5%	19,584	76,123,404	7.8%	10,400	53%	67,217,322
Ocean	46	2.2%	6	3,016	66	1.5%	25,070,517	1.7%	8,313	16,568,186	1.7%	5,494	66%	8,502,330
Passaic	1	0.0%	1	15	15	0.0%	2,566,650	0.2%	171,855	947,409	0.1%	63,435	37%	1,619,241
Salem	223	10.7%	10	28,804	129	14.6%	114,486,325	7.6%	3,975	89,253,135	9.2%	3,099	78%	25,233,189
Somerset	101	4.8%	7	7,967	79	4.0%	125,582,591	8.3%	15,762	73,154,734	7.5%	9,182	58%	52,427,857
Sussex	130	6.2%	13	14,515	112	7.4%	46,562,395	3.1%	3,208	31,840,558	3.3%	2,194	68%	14,721,837
Warren	209	10.0%	17	19,923	95	10.1%	110,279,946	7.3%	5,535	72,711,022	7.5%	3,650	66%	37,568,924
Total State	2,089		175	196,982			1,505,805,523		7,644	971,265,450		4,931	65%	534,540,074

Source: New Jersey State Agriculture Development Committee

As of May 29, 2012

New Jersey Farmland Preservation Program
PERMANENTLY PRESERVED FARMLAND BY FISCAL YEAR

	Number of Farms								Number of Acres								
Fiscal Year	County Easement Purchase	Planning Incentive Grants	Non Profit Grants	Fee Simple Purchase	SADC Direct Easement Purchase	Donated and State Owned	Yearly Total	Cumu-lative Total	County Easement Purchase	Planning Incentive Grants	Non Profit Grants	Fee Simple Purchase	SADC Direct Easement Purchase	Donated and State Owned	Yearly Total	Cumu-lative Total	Acres/ Avg Year
1985	5						5	5	608						608	608	122
1986	1						1	6	160						160	768	160
1987	3						3	9	249						249	1,017	83
1988	9						9	18	859						859	1,875	95
1989	16						16	34	2,190						2,190	4,065	137
1990	41					1	42	76	6,300					142	6,441	10,506	153
1991	3			2			5	81	447			524			971	11,477	194
1992	30						30	111	4,641						4,641	16,118	155
1993	6						6	117	1,121						1,121	17,240	187
1994	28			2			30	147	4,225			491			4,716	21,956	157
1995	29			1			30	177	4,275			233			4,508	26,464	150
1996	23						23	200	2,695						2,695	29,159	117
1997	53			3		2	58	258	7,040			702		635	8,377	37,536	144
1998	51			3		2	56	314	8,835			1,012		291	10,138	47,674	181
1999	54			2		1	57	371	6,104			293		105	6,502	54,177	114
2000	68			8	1	3	80	451	8,567			2,068	237	637	11,508	65,685	144
2001	92	2	1	6	13	2	116	567	9,485	237	198	732	1,264	1,654	13,569	79,254	117
2002	103	1	1	11	21	2	139	706	9,692	97	132	1,083	1,894	876	13,774	93,028	99
2003	93	14	5	6	55	1	174	880	8,405	675	603	526	4,369	100	14,677	107,705	84
2004	130	35	2	5	59	4	235	1,115	8,781	2,072	116	600	5,115	381	17,065	124,770	73
2005	66	26		1	28		121	1,236	6,319	1,113		219	2,866		10,516	135,287	87
2006	82	29	1	5	23		140	1,376	5,270	1,421	32	737	2,781		10,240	145,526	73
2007	102	49	5	7	17		180	1,556	6,821	2,183	254	848	1,226		11,332	156,859	63
2008	54	56	6	3	17		136	1,692	3,676	3,210	367	298	1,593		9,145	166,003	67
2009	47	44	13	1	31		136	1,828	3,222	2,683	1,148	128	4,374		11,555	177,558	85
2010	53	21	16		14		104	1,932	3,101	1,853	1,659		1,541		8,154	185,712	78
2011	62	27	4		13		106	2,038	3,536	1,581	269		1,983		7,369	193,081	70
2012	32	12	2		5		51	2,089	2,502	650	95		654		3,901	196,982	76
Total	1,336	316	56	66	297	18	2,089		129,123	17,773	4,874	10,495	29,896	4,820	196,982		94
% Total	64%	15%	3%	3%	14%	1%			66%	9%	2%	5%	15%	2%			

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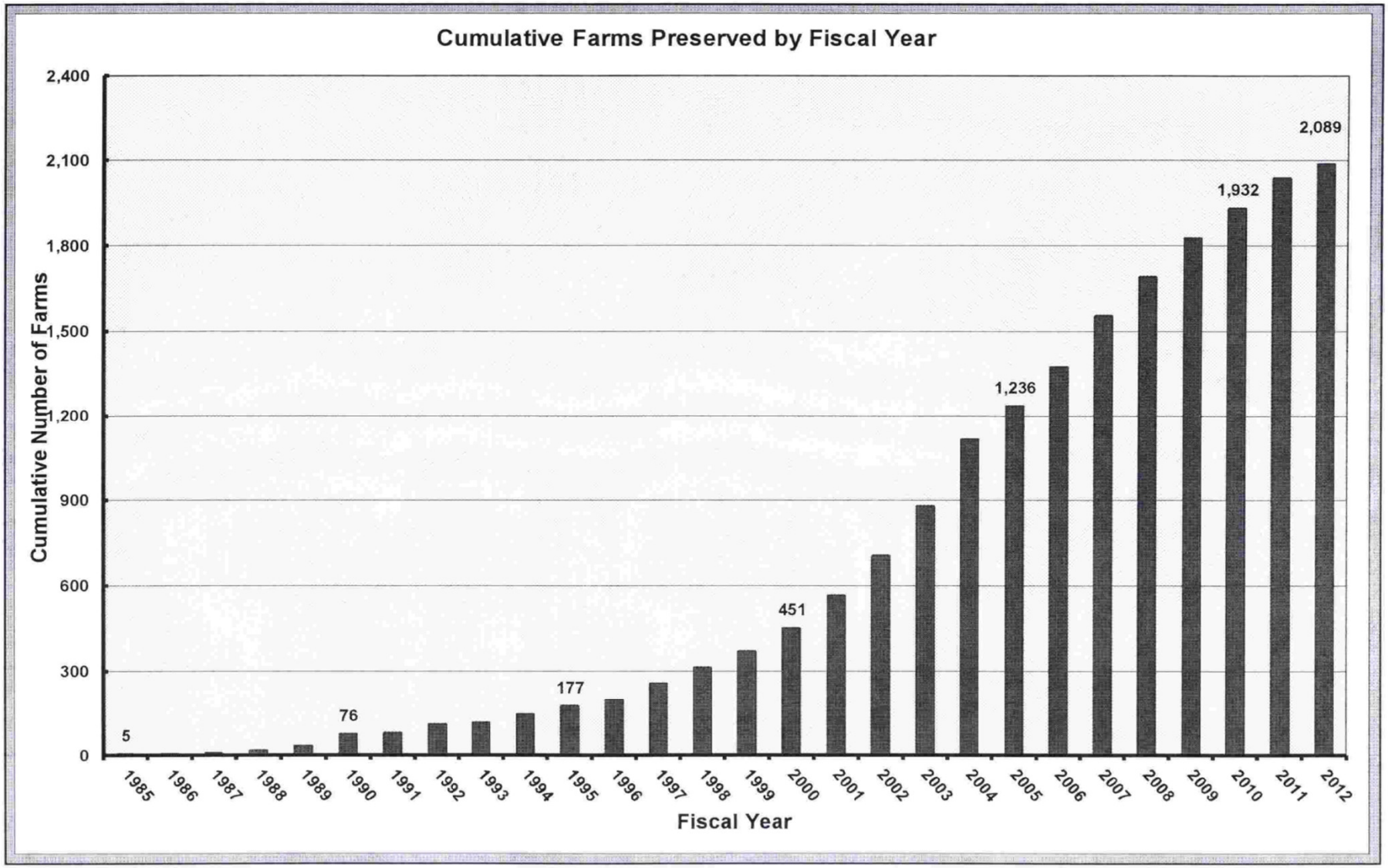
Source: New Jersey State Agriculture Development Committee

As of May 29, 2012

New Jersey Farmland Preservation Program
PERMANENTLY PRESERVED FARMS BY FISCAL YEAR



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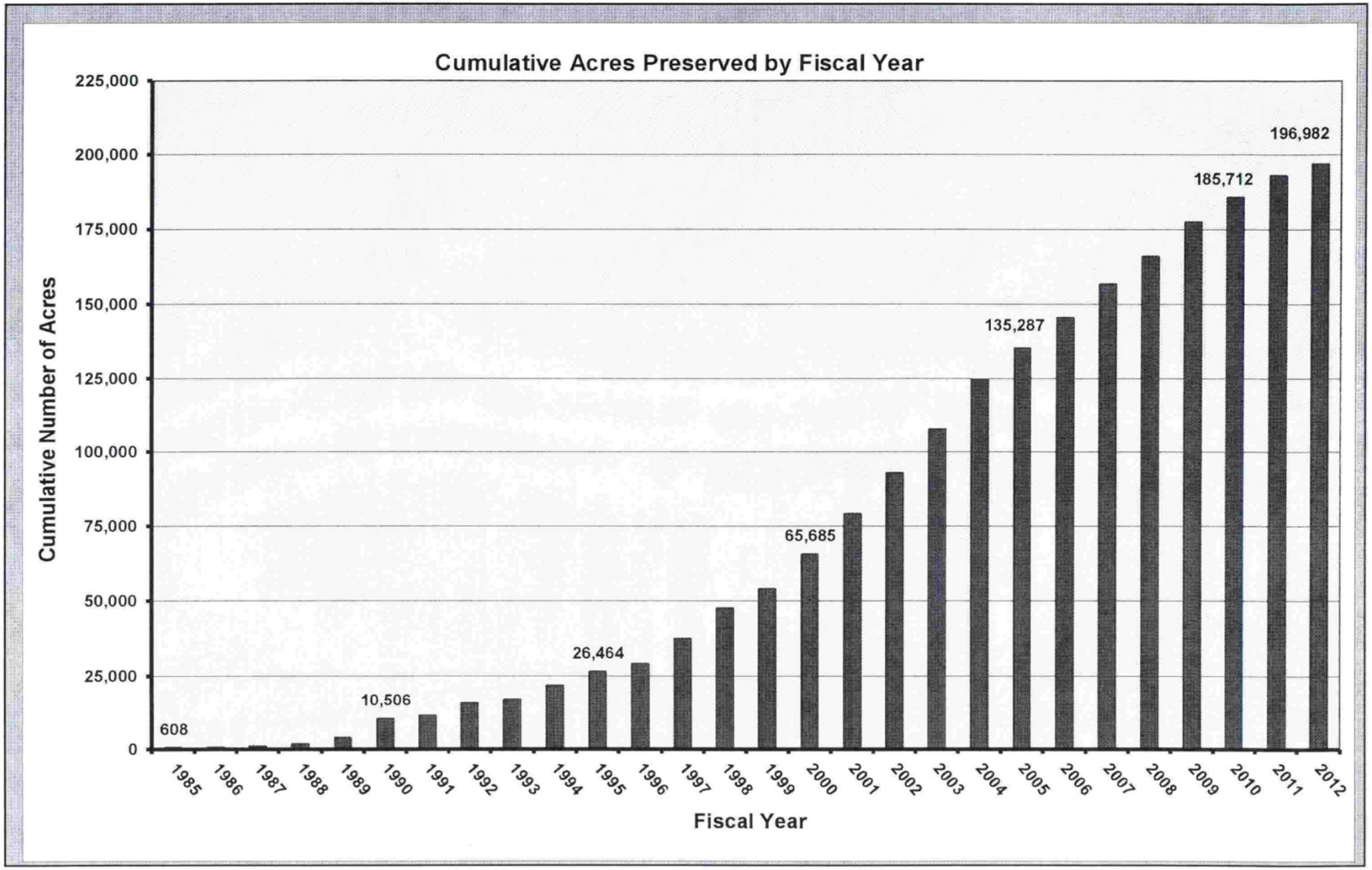
Source: New Jersey State Agriculture Development Committee

As of May 29, 2012

New Jersey Farmland Preservation Program
PERMANENTLY PRESERVED ACRES BY FISCAL YEAR



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Source: New Jersey State Agriculture Development Committee

As of May 29, 2012

Restricted Farmland Sales

- County by County Breakdown

County	Number Farms	Acres	Avg. Sale Price
Atlantic	2	125	$5,578/ac
Burlington	4	293	$6,363/ac
Cumberland	1	74	$6,351/ac
Gloucester	3	126	$4,722/ac
Hunterdon	3	344	$6,999/ac
Mercer	4	260	$7,919/ac
Monmouth	1	32	$19,260/ac
Morris	2	698	$7,416/ac
Somerset	1	64	$12,925/ac
Sussex	3	319	$6,041/ac
Totals	24 Sales	2,335 Acres	$8,357 per acre average

Above figures include contributory value of improvements

Appraisal Handbook Amendments

Paul Burns, Chief Review Appraiser - SADC

http://www.state.nj.us/agriculture/sadc

Click Farmland Preservation Program

Click Appraisals

Click Farmland Appraisal Resources

2012 SADC Appraiser Handbook

Handbook

- **Page 5&6: SADC Appraisal Policy – (a.)**
- This policy discusses the appraisal update letter policy. The reference to County is replaced with Contracting Agent.
- **Reason:** To reflect the multiple agents that are now responsible for ordering appraisals.

Handbook

- **Page 6: SADC Appraisal Policy**
- **Statement Added (e):** All appraisals requiring federal funding in the Farm and Ranchland Protection Program are not eligible for letter updates.
- **Reason:** To insure a current and relevant valuation of the subject property in compliance with federal standards issued by NRCS.

Handbook

- **3. Page 13: Exceptions paragraph 4 (example)**
- **Statement removed:** This is not required or necessary, but the appraiser always has this option.
- **Statement Added:** Typically, there will be no measurable impact to the per acre value. In instances where the exception(s) constitute a larger area of the farm or contribute significantly to the value of the overall property, the above example may become critical to the accurate valuation of the property's unrestricted and deed restricted values.
- **Reason:** Replaces the stricken statement and provides more clarity

Handbook

- **4. Page 18: Appraisal Format; Certification of Appraisal**

- **Statement Added:** The appraiser is now required by USPAP to certify that they have or have not performed any services, appraisal or otherwise, regarding the subject property over the past three years. The appraiser should explain the nature of any such services and for whom they were performed.

- Reason: Reminder that USPAP now requires reporting of any services rendered regarding the subject property in the last three years.

State Board of Real Estate Appraisers

Barry Krauser, MAI, CRE

Writing Pinelands Appraisals for the SADC

- Paul Burns – SADC Chief Review Appraiser

What Makes a Pinelands Appraisal Different from a typical SADC assignment

- SADC Special Guidelines on Improvements
- Contributory Value of Credits
- Unrestricted Highest and Best Use is usually Agriculture
- Meeting or conference with SADC Appraisal staff is required.
- LOI – Letter of Interpretation has been secured determining the credit allocation to the subject property
- Pinelands Supplement to the Appraisal Handbook

SADC Special Guidelines on Agricultural Improvements

- The following improvements should “not” be valued:
- All structures on exception areas, severable and non-severable.
- Residential structures.
- Agricultural labor housing.

SADC Special Guidelines on Agricultural Improvements

- **The following improvements should be valued:**
- Irrigation systems,
- agricultural buildings (except for agricultural labor housing)
- and permanent plantings if the highest and best use of the property is agriculture.

Pinelands Formula

- The Pinelands Formula is an alternative valuation (non-appraisal) available to landowners in the Pinelands Agricultural Production and Special Agricultural Production Areas.
- Formula Value may not exceed 80% of the Unrestricted Fee Simple Value (Inclusive of Agricultural Improvements in accordance with the SADC Pinelands guidelines)

Components of Unrestricted Appraised Value in a Pinelands Appraisal

- Land
- Agricultural Improvements per SADC Guidelines
- Credits

Comparative Approach component breakout

- Can be Land Only (often is)
  - Value of Credits can be added to vacant land sales – usually valued using the Pinelands Development Credit Bank list of sales. Through comparative approach or add on.
  - Value of agricultural improvements is added, Using cost service to value improvements.
  - After value is usually the same as before value less the reduction in credit value contribution. Possibly further damages related to the SADC deed of easement, but only if they can be quantified.

What could cause a difference between SADC restricted and Pinelands Restricted Value

- Abnormalities in local municipal zoning that allow for more development on a property such as one house every 6 years on a 5 acre lot without a farm management plan or ties to the larger parcel.
- Despite Pinelands zoning density – the property is of sufficient size to allow a clustered development on site. A 200 acre farm would allow up to 5 houses clustered on site.
- Comparable sales simply indicate it, but you can not say this if all you use are deed restricted sales.

Example – Adding to Land Value

- Analysis of Before Value land sales causes appraiser to conclude $5,000 per acre X 100 acres = $500,000
- Analysis of credits causes appraiser to conclude $10,000 per right (4 rights per credit), LOI indicates subject has 20 rights (5 credits) =$200,000.
- Appraiser analysis of cost service for two barns, indicates depreciated value of $30,000

Example continued

- Therefore Before Value:
- Land : $500,000
- Credits: $200,000
- Improvements : $ 30,000
- Total: $730,000/100 acres = $7,300 per acre
- Appraisers should consider any applicable discounting involved in sale of credits, improvements and land together

Example Continued

- Therefore After Value:
- Land : $500,000
- Improvements : $ 30,000
- Total: $530,000/100 acres = $5,300 per acre
- Appraisers should consider any applicable discounting involved in sale of improvements and land together.

Example continued

- Certification reads:
- Before Value: $7,300/Acre $730,000
- After Value: $5,300/Acre $530,000
- Easement Value: $2,000/Acre $200,000

Example: Discounting for Land and Credits together

- Land $500,000
- Credits $200,000
- Total: $700,000
- Appraiser discounts 5% for sale of land and credits together = $665,000 or $6,650 per acre.
- + improvements still at $30,000 = $695,000 or $6,950 per acre

Example - Certification

Before Value:	$6,950/ acre	$695,000
After Value:	$5,300/acre	$530,000
Easement Value:	$1,650/acre	$165,000

True Comparative Approach

- Compares Subject to the Sales
  - Sales are adjusted for different contributory value of improvements.
  - Sales should have credits included with the realty that transacted.
    - Adjustments are made for differences (amount of credits and value of credits at date of sale)
    - Possibly adjust sales with no credits to subject with credits (Best when Subject has limited amount of credits)

Typical Pinelands Adjustment Grid

	Subject	Sale 1	Sale 2	Sale3
Property Rights				
Conditions of Sale				
Financing				
Market Conditions				
Location				
Size				
Topography				
Zoning				
Tillable Acres				
PDC Value		-20%	-30%	-10%
Soils				
Improvements		+10%	-15%	+20%

Orchard Adjustment Grid

- Location
- Size
- Topography
- Zoning
- Tillable Acres ??
- PDCs
- Soils
- Improvements
- Planted Acres %
- Variety quality or type (apple, peach, pear etc.)
- Tree Age

Blueberries

- Location
- Size
- Topography
- Zoning
- Tillable Acres ??
- PDCs
- Soils
- Improvements
- Planted Acres %
- Variety Quality or type (Duke, Elliot, Weymouth, Bluecrop etc.)
- Plant Age

Cranberries – Bog Acres

- Location
- Size in Bog acres
- Shape
- Topography
- Zoning
- Support Land Ratio
- PDCs
- Soils
- Improvements
- Variety quality or type (Stevens, Ben Lear, Pilgrim, Early Black, Howe McFarland)
- Plant Age
- Water supply

Bog Acres

- On Cranberry Farms the unit of comparison is bog acres.
- A subject farm may be total – 100 acres, but only 10 acres are in bogs. The appraiser compares 10 bog acres to his comparable sales, which should all be cranberry farms.

No or limited amount of sales of Orchards, Blueberries, Cranberries

- Residual and Discounted Cash Flow Techniques. May require use of alternative methods to a comparative approach as a last resort.
- Can be useful tools in checking comparative approach

Residual Techniques

- May be needed to determine the value of a component such as blueberry plants, peach orchards etc.
- Example: You may have 1 sale of a 100 acre property with Blueberry bushes and improvements on 75% of the property – sells for $15,000 per acre.

Residual Technique Example

- You have determined contributory vacant land value of the sale at $4,000 per acre.
- You determined depreciated irrigation improvements over 75 acres for $50,000
- A Packing house and barn in fair/avg. condition contributed $100,000

Residual Technique continued

- Sale sold at $1,500,000
- Land contributed - $ 400,000
- Improvements - $ 150,000
- Residual Blueberries $ 950,000
- $950,000/75Acres = $12,666/ Acre attributable to the Blueberry Bushes on that sale.

Residual Technique continued – permanent plantings

- Subject is 100 acres – 10 acres covered in Blueberries. You may want to use the residual technique to support an adjustment to vacant land sales – no bushes.
- Comparable Vacant Land Sale indicates $12,500/acre for bushes. Subject may be superior for the bushes by say 25% to 30% (10 acres at $12,500 per acre = $120,500 on a $400,000 indicated land value. (Sale is identical to subject other than bushes) or Add $120,500 to the final land only value conclusion.

Residual Technique continued permanent plantings

- Subject is 100 acres – 90% covered in Blueberry Bushes – 90 acres. Not adjustable to vacant land
- Vacant Land sales indicate $4,000 per acre or $400,000
- Residual Technique Indicated $12,500/Acre or $1,125,000 (90 acres) for bushes? One sale may not be a sufficient sample. Appraiser should look to the DCF technique (plants only) rather than simply add $ to land value conclusion based on the residual technique. The appraiser should also directly compare the sale to the subject.

Discounted Cash Flow Method

- Permanent Plantings – Could be necessary to run a discounted cash flow analysis in order to address the contributory value of the permanent plantings if there are no sales of comparable properties. A supplement to your comparative/cost approaches.
  - Blueberry, Peach, Apple, Cranberry, Pears, Nuts etc.

DCF

- You need
  - Quantity and Quality of Fruit/Permanent Planting
  - Annual Production History 3 to 5 years – Income/expense statements
  - Project Gross Revenue
  - Property History and understanding of the General Market for that product.
  - Expenses, costs to produce
  - Entrepreneurial Profit
  - Develop Net Annual Revenue
  - Develop a Discount Rate.

Annual Income Statement – Hypothetical Fruit Crop

1.	Price per pound	$1.00
2.	Expenses to produce	$0.65
3.	Net $ per pound	$0.35
4.	Avg. Number per tree/bush	100
5.	Avg. Weight/Fruit	.50 lbs
6.	Total pounds per tree/bush	50
7.	Number of trees	2,000
8.	Total Pounds per year	100,000
9.	Net Annual revenue (Net $/lb x total pounds)	$35,000

Discount Rate - Components

- Inflation Rate
- +Risk Free Component
- +General Risk Premium
- +Property Specific Risk Premium
- = Discount Rate
- Appraiser can also consider market surveys or extract discount rate from comparable sales

Discount Rate

- Inflation Rate 2.5%
- +Risk Free Component 3.5%
- +General Risk Premium 9%
- +Property Specific Risk Premium 3.0%
- = Discount Rate 18%
- annual revenue

Example

- You may have varying crops
- Varying qualities/varieties of same fruit
- Varying remaining lives

Present Value of Standing Crops

	NOI Crop 1	NOI Crop 2	NOI Crop 3	NOI Crop 4	NOI Crop 5	Total NOI	PV at 18%
Remaining Life	10 years	12 years	15 years	10 years	15 years		
Year 1	$ 15,000.00	$ 18,000.00	$ 16,000.00	$ 10,000.00	$ 30,000.00	$ 89,000.00	$75,423.7
Year 2	$ 15,000.00	$ 18,000.00	$ 16,000.00	$ 10,000.00	$ 30,000.00	$ 89,000.00	$63,918.4
Year 3	$ 15,000.00	$ 18,000.00	$ 16,000.00	$ 10,000.00	$ 30,000.00	$ 89,000.00	$54,168.1
Year 4	$ 15,000.00	$ 18,000.00	$ 16,000.00	$ 10,000.00	$ 30,000.00	$ 89,000.00	$45,905.2
Year 5	$ 15,000.00	$ 18,000.00	$ 16,000.00	$ 10,000.00	$ 30,000.00	$ 89,000.00	$38,902.7
Year 6	$ 15,000.00	$ 18,000.00	$ 16,000.00	$ 10,000.00	$ 30,000.00	$ 89,000.00	$32,968.4
Year 7	$ 15,000.00	$ 18,000.00	$ 16,000.00	$ 10,000.00	$ 30,000.00	$ 89,000.00	$27,939.3
Year 8	$ 15,000.00	$ 18,000.00	$ 16,000.00	$ 10,000.00	$ 30,000.00	$ 89,000.00	$23,677.4
year 9	$ 15,000.00	$ 18,000.00	$ 16,000.00	$ 10,000.00	$ 30,000.00	$ 89,000.00	$20,065.5
year 10	$ 15,000.00	$ 18,000.00	$ 16,000.00	$ 10,000.00	$ 30,000.00	$ 89,000.00	$17,004.7
Year 11	$ -	$ 18,000.00	$ 16,000.00	$ -	$ 30,000.00	$ 64,000.00	$10,362.8
Year 12	$ -	$ 18,000.00	$ 16,000.00	$ -	$ 30,000.00	$ 64,000.00	$8,782.0
Year 13	$ -	$ -	$ 16,000.00	$ -	$ 30,000.00	$ 46,000.00	$5,349.2
Year 14	$ -	$ -	$ 16,000.00	$ -	$ 30,000.00	$ 46,000.00	$4,533.2
Year 15	$ -	$ -	$ 16,000.00	$ -	$ 30,000.00	$ 46,000.00	$3,841.7
Total	$ 150,000.00	$ 216,000.00	$ 240,000.00	$ 100,000.00	$ 450,000.00	$ 1,156,000.00	**$432,842.7**

Present Value of Standing Crops

	NOI Crop 1	NOI Crop 2	NOI Crop 3	NOI Crop 4	NOI Crop 5	Total NOI	PV at 24%
Remaining Life	10 years	12 years	15 years	10 years	15 years		
Year 1	$ 15,000.00	$ 18,000.00	$ 16,000.00	$ 10,000.00	$ 30,000.00	$ 89,000.00	$71,774.19
Year 2	$ 15,000.00	$ 18,000.00	$ 16,000.00	$ 10,000.00	$ 30,000.00	$ 89,000.00	$57,882.41
Year 3	$ 15,000.00	$ 18,000.00	$ 16,000.00	$ 10,000.00	$ 30,000.00	$ 89,000.00	$46,679.37
Year 4	$ 15,000.00	$ 18,000.00	$ 16,000.00	$ 10,000.00	$ 30,000.00	$ 89,000.00	$37,644.65
Year 5	$ 15,000.00	$ 18,000.00	$ 16,000.00	$ 10,000.00	$ 30,000.00	$ 89,000.00	$30,358.59
Year 6	$ 15,000.00	$ 18,000.00	$ 16,000.00	$ 10,000.00	$ 30,000.00	$ 89,000.00	$24,482.73
Year 7	$ 15,000.00	$ 18,000.00	$ 16,000.00	$ 10,000.00	$ 30,000.00	$ 89,000.00	$19,744.14
Year 8	$ 15,000.00	$ 18,000.00	$ 16,000.00	$ 10,000.00	$ 30,000.00	$ 89,000.00	$15,922.69
year 9	$ 15,000.00	$ 18,000.00	$ 16,000.00	$ 10,000.00	$ 30,000.00	$ 89,000.00	$12,840.88
year 10	$ 15,000.00	$ 18,000.00	$ 16,000.00	$ 10,000.00	$ 30,000.00	$ 89,000.00	$10,355.55
Year 11	$ -	$ 18,000.00	$ 16,000.00	$ -	$ 30,000.00	$ 64,000.00	$6,005.39
Year 12	$ -	$ 18,000.00	$ 16,000.00	$ -	$ 30,000.00	$ 64,000.00	$4,843.06
Year 13	$ -	$ -	$ 16,000.00	$ -	$ 30,000.00	$ 46,000.00	$2,807.22
Year 14	$ -	$ -	$ 16,000.00	$ -	$ 30,000.00	$ 46,000.00	$2,263.88
Year 15	$ -	$ -	$ 16,000.00	$ -	$ 30,000.00	$ 46,000.00	$1,825.71
Total	**$ 150,000.00**	**$ 216,000.00**	**$ 240,000.00**	**$ 100,000.00**	**$ 450,000.00**	**$ 1,156,000.00**	**$345,430.48**

Charts

- I used 15 years for the power point demonstration so it would legibly fit into the presentation. Typically Orchards, plantings have much longer lives of 40+ years and your DCF analysis should recognize that.

Value using DCF for permanent plants

- Land Value: $250,000
- Credits: $100,000
- Plants: $430,000
- Other improvements: $ 50,000
- Total: $830,000/50 acres = $16,600 per acre. Appraiser may still want to consider further discounting if they have evidence to suggest it. Perhaps direct comparison of sale(s) suggested $15,000 per acre.
- After Value – credits are gone, any discount for deed restriction is recognized

Statistical and Information Sources

- USDA National Agricultural Statistics Service - NASS www.nass.usda.gov
- USDA Census Of Agriculture www.agcensus.usda.gov
- USDA Economic Resource Service –ERS
- NJ Department of Agriculture – www.state.nj.us/agriculture
- SADC Website www.state.nj.us/agriculture/SADC
- Rutgers NJ Agricultural Experiment Station http://njaes.rutgers.edu